State of Ohio Environmental Protection Agency

Southeast District Office

2195 Front Street
Logan, OH 43138

TELE: (740) 385-8501 FAX: (740) 385-6490

Bob Taft, Governor
Jennette Bradley, Lieutenant Governor
Christopher Jones, Director

September 1, 2004

Re: Belmont County
American Energy Corp., Century Mine
OIL00091*GD
NPDES Modification
Correspondence (IWW)

Ms. Melanie Murray
American Energy Corp., Century Mine
43521 Mayhugh Hill Road
Beallsville, Ohio 43716

Dear Ms. Murray:

We have received your NPDES permit modification for the addition of process discharges from ponds 20 and 21. Additional information is required before processing can continue.

1. Since the ponds were built under the Coal General Permit, a Permit to Install (PTI) application is not required, however, copies of the pond designs are required.

2. There is a fee of $200.00 to process an NPDES permit modification application. Please make the check payable to the "State of Ohio" and submit it along with these revisions.

3. Provide an estimate of flow rates for each pond, pollutants that are expected to be in the untreated water (include and chemicals added) and expected quality of the treated water. Address any treatment processes (pH adjustment, settling) and chemicals used for treatment (soda ash, polymers). This response should also be included in the answers to items (C)(4)(d) and (C)(4)(e) on the antidegradation form.

4. For clarification, is this air shaft used for both providing air into the underground mining operation and for pumping excess water that accumulates in the underground mine out for treatment and disposal at the surface?

If you have any questions, please contact me at (740) 380-5284.

Sincerely,

Ms. Abbot Stevenson
Environmental Engineer
Permits and Enforcement Section
Division of Surface Water

AS/dh

c: Ellen Greer, Hamilton and Assoc.

342 High St., Box 471
Flushing, OH 43977
Ph: (740) 968-4947
Fax: (740) 968-4225
e-mail: hamilton@1st.net
www.hamiltonandassoc.com

Jack A. HAMILTON & Associates, Inc.

Civil Engineering
Land Surveying
Mine Permitting
GIS Data Services
Land Development
Global Positioning Systems

September 23, 2004

Re: Belmont County
American Energy Corp., Century Mine
OIL00091*GD
NPDES Modification

Ms. Abbot Stevenson
Ohio Environmental Protection Agency
Southeast District Office
2195 Front Street
Logan, OH 43138

Dear Abbot,

In response to your letter dated September 1, 2004, requesting additional information for processing of the above referenced permitting action, (Perkins Run Air Shaft ponds) the following information is being submitted, or was revised as necessary.

1. Copies of the pond designs are attached.

2. A fee check for $200.00 made payable to "Treasurer, State of Ohio" is attached.

3. Provided the requested information. See revised response to the Application for Modification of Ohio NPDES Permit, Item 7., as well as the revised responses to items C.4.d. and C.4.e. in Attachment 1 to the Antidegradation Addendum, pages 2 and 3.

4. See revised response to the Application for Modification of Ohio NPDES Permit, Item 7., as well as the revised response to item C.4.d. in Attachment 1 to the Antidegradation Addendum, page 2.

If you have any questions concerning these revisions, please do not hesitate to contact me at the number shown above.

Sincerely,

Jack A. Hamilton & Associates, Inc.
Consultants for American Energy Corp.

Ellen Greer

Ellen Greer
Permitting

DEC 06 2004

c: Melanie Murray, American Energy Corp.

Ohio Environmental Prote
Application for Modifica

Check ID#: _____
Document#: 13356
Org/Place/Person: 42605
Revenue ID#: 476522

For Agency Use

Application Number
_____
Date Received
_____
Year Month Day

1. Number of permit for which modification is being requested **OIL00091*ED, OH0059552**

2. Name of organization responsible for facility **American Energy Corporation**

3. Address, location, and telephone number of facility producing discharge:

A. Name **American Energy Corporation**

B. Mailing Address:

1. Mailing Address **43521 Mayhugh Hill Road**

2. City **Beallsville**

3. State **Ohio** 4. Zip Code **43716**

C. Location:

1. Street **West of State Route 145, between T.R. 82 and T.R. 103**

2. City **1 mile north of Beallsville** 3. County **Belmont**

D. Telephone No. **(740)** **926-9152**
Area Code

4. Describe in detail the provision(s) of the permit the applicant wishes to modify.

Part I, Page 2 of 11, Item 1.

5. Describe in detail the reason a modification is desired. (See rule 3745-33-06 of the Ohio Administrative Code [formerly OEPA Regulation EP-31-06] for grounds for modification.)

Due to a proposed change in operations at the Perkins air shaft site, American Energy Corporation is requesting that Sediment Ponds 020 and 021 be utilized for pumped mine water storage and discharge, if necessary.

DEC 0 6 2004

6. Name of receiving water or waters Piney Creek

7. Describe requested modification in sufficient detail to allow Ohio Environmental Protection Agency personnel to process your request. If a Permit to Install is required under Chapter 3745-31 of the Ohio Administrative Code (formerly Ohio EPA Regulation EP-30) attach a completed application for a Permit to Install and make no other entries in this section. If a Permit to Install is not required and additional space is needed, provide the additional information on 8-½ by 11 bond paper and mark "Item 7, Continued" in the upper left hand corner of each extra sheet.

Ponds 020 and 021 are currently utilized as sediment control structures only for the Perkins Air shaft site associated with the Century Mine. Ponds 020 and 021 are currently covered under General Construction Stormwater Permit, Facility #0GC00168*AG. American Energy Corporation proposes to pump water from the underground mine to Ponds 020 and 021 for treatment and discharge to Piney Creek when necessary. AEC is requesting modification of Individual N.P.D.E.S. permit #OIL00091 to include Ponds 020 and 021.

[This application must be signed by the person who applied for the original permit or some other person eligible under Rule 3745-33-03(D) of the Ohio Administrative Code (formerly OEPA Regulation EP-31-03(D)].

I certify that I am familiar with the information contained in the application and that to the best of my knowledge and belief such information is true, complete, and accurate.

Robert D. Moore
Printed Name of Person Signing

President
Title

July 14, 2004
Date Application Signed

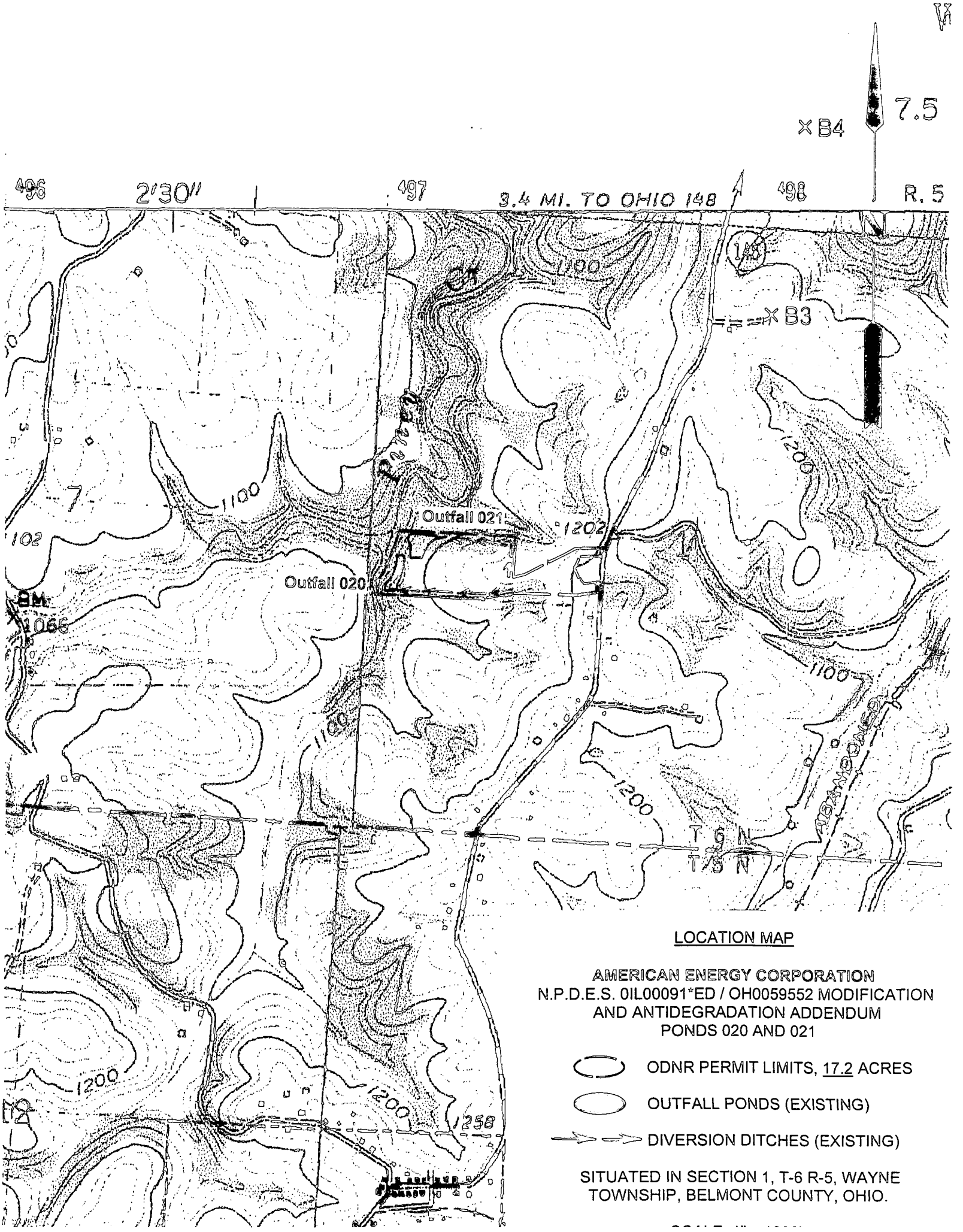
RDM 7/13/04

Signature of Applicant

-tKB 7/13/04

Mail or take this form to the Ohio EPA District Office to which you send monitoring reports.

OEPA-NPDES-18



LOCATION MAP

AMERICAN ENERGY CORPORATION
N.P.D.E.S. 0IL00091*ED / OH0059552 MODIFICATION
AND ANTIDEGRADATION ADDENDUM
PONDS 020 AND 021

ODNR PERMIT LIMITS, 17.2 ACRES

OUTFALL PONDS (EXISTING)

DIVERSION DITCHES (EXISTING)

SITUATED IN SECTION 1, T-6 R-5, WAYNE
TOWNSHIP, BELMONT COUNTY, OHIO.

Ohio EPA

State of Ohio Environmental Protection Agency
DIVISION OF SURFACE WATER

Antidegradation Addendum

In accordance with Ohio Administrative Code 3745-1-05, (Antidegradation), additional information may be required to complete your application for a permit to install or NPDES permit. For any application that may result in an increase in the level of pollutants being discharged (NPDES and/or PTI) or for which there might be activity taking place within a stream bed, the processing of the permit(s) may be required to go through procedures as outlined in the antidegradation rule. The rule outlines procedures for public notification and participation as well as procedures pertaining to the levels of review necessary. The levels of review necessary depend on the degradation being considered/requested. The rule also outlines exclusions from portions of the application and review requirements and waivers that the Director may grant as specified in Section 3745-1-05(D) of the rule. Please complete the following questions. The answers provided will allow the Ohio EPA to determine if additional information is needed. **All projects that require both an NPDES and PTI should submit both applications simultaneously to avoid going through the antidegradation process separately for each permit.**

A. **Applicant:** AMERICAN ENERGY CORPORATION

Facility Owner: AMERICAN ENERGY CORPORATION

Facility Location (city and county): (NORTH OF) ALLEDONIA, BELMONT COUNTY

Application or Plans Prepared By: Jack A. Hamilton & Associates, Inc.

Project Name: Perkins Air Shaft Sediment Ponds

NPDES Permit Number (if applicable): OH0012661 / OIL00046/OGC00168*AG

B. **Antidegradation Applicability**

Is the application for? (check as many as apply):

____ Application with no direct surface water discharge (Projects that do not meet the applicability section of 3745-1-05(B)1, i.e., on site disposal, extensions of sanitary sewers, spray irrigation, indirect discharger to POTW, etc.). (Complete Section E)

____ Renewal NPDES application or PTI application with no requested increase in loading of currently permitted pollutants (Complete Section E. Do not complete Sections C or D).

____ PTI and NPDES application for a new wastewater treatment works that will discharge to a surface water. (Complete Sections C and E)

_X_ An expansion/modification of an existing wastewater treatment works discharging to a surface water that will result in any of the following (PTI and NPDES): (Complete Section C and E)
- addition of any pollutant not currently in the discharge, or
- an increase in mass or concentration of any pollutant currently in the discharge, or
- an increase in any current pollutant limitation in terms of mass or concentration.

_____ PTI that involves placement of fill or installation of any portion of a sewerage system (i.e., sanitary sewers, pump stations, WWTP, etc.)within 150 feet of a stream bed. Please provide information requested on the stream evaluation addendum (i.e., number of stream crossings, fill placement, etc.) and complete section E.

_____ Initial NPDES permit for an existing treatment works with a wastewater discharge prior to October 1, 1996. (Complete Sections D and E)

_____ Renewal NPDES permit or modification to an effective NPDES permit that will result in any of the following: (Complete Section C and E)
- a new permit limitation for a pollutant that previously had no limitation, or
- an increase in any mass or concentration limitation of any pollutant that currently has a limitation.

C. Antidegradation Information

1. Does the PTI and/or NPDES permit application meet an exclusion as outlined by OAC 3745-1-05(D)(1) of the Antidegradation rule?

   _____ Yes (Complete Question C.2)

   __X__ No (Complete Questions C.3 and C.4)

2. For projects that would be eligible for exclusions provide the following information.

   a. Provide justification for the exclusion.

   b. Identify the substances to be discharged, including the amount of regulated pollutants to be discharged in terms of mass and concentration.

   c. A description of any construction work, fill or other structures to occur or be placed in or near a stream bed.

3. Are your requesting a waiver as outlined by OAC 3745-1-05(D)(2-7) of the Antidegradation rule?

   __X__ No

   _____ Yes

   If you wish to pursue one of the waivers, please identify the waiver and submit the necessary information to support the request. Depending on the waiver requested, the information required under question C.4 may be required to complete the application.

4. For all projects that do <u>not</u> qualify for an exclusion a report must accompany this application evaluating the preferred design alternative, non-degradation alternatives, minimal degradation alternatives, and mitigative techniques/measures for the design and operation of the activity. The information outlined below should be addressed in this report. If a waiver is requested, this section is still required.

   See Attachment #1 to Antidegradation Addendum

   a. Describe the availability, cost effectiveness and technical feasibility of connecting to existing central or regional sewage collection and treatment facilities, including long range plans for sewer service outlined in state or local water quality management planning documents and applicable facility planning documents. **See Attachment #1 to Antidegradation Addendum**

   b.

c. List and describe all government and/or privately sponsored conservation projects that may have been or will be specifically targeted to improve water quality or enhance recreational opportunities on the effected water resource.

d. Proved a brief description below of all treatment/disposal alternatives evaluated for this application. (If additional space is needed please attach to the end of this addendum).

Preferred design alternative: _____

_____

_____

Non-degradation alternative'(s): _____

_____

_____

Minimal degradation alternative'(s): _____

_____

_____

Mitigative technique/measure'(s): _____

_____

_____

At a minimum, the following information must be included in the report for each alternative evaluated.

e. Outline of the treatment/disposal system evaluated, including the costs associated with the equipment, installation, and continued operation and maintenance.

f. Identify the substances to be discharged, including the amount of regulated pollutants to be discharged in terms of mass and concentration.

g. Describe the reliability of the treatment/disposal system, including but not limited to the possibility of recurring operation and maintenance difficulties that would lead to increased degradation.

h. Describe any impacts to human health and the overall quality and value of the water resource.

i. Describe and provide an estimate of the important social and economic benefits to be realized through this proposed project. Include the number and types of jobs created and tax revenues generated.

j. Describe environmental benefits to be realized through this proposed degradation.

k. Describe and provide an estimate of the social and economic benefits that may be lost as a result of this project. Include the impacts on commercial and recreational use of the water resource.

See Attachment #1 to Antidegradation Addendum for responses to item b. through k.

See Attachment #1 to Antidegradation Addendum for responses to items l. through m.

D. Discharge Information

_____ Yes

_____ No

E. [illegible] to my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete.

This section must be signed by the same responsible person who signed the accompanying permit application or certification as per 40 CFR 122.22.

Signature _____

Date 10-06-06

RECEIVED
OCT 10 2006
OHIO ENVIRONMENTAL PROTECTION AGENCY
SOUTHEAST DISTRICT

l. Describe the environmental benefits lost as a result of this project. Include the impact on the aquatic life, wildlife, threatened or endangered species.

m. A description of any construction work, fill or other structures to occur or be placed in or near a stream bed.

n. Provide any other information that may be useful in evaluating this application.

See Attachment #1 to Antidegradation Addendum for responses to items l. through m.

D. Discharge Information

1. For treatment/disposal systems constructed pursuant to a previously issued Ohio EPA PTI, provide the following information:
PTI Number _____
PTI Issuance Date _____
Initial Date of Discharge _____

2. Has the appropriate NPDES permit application form been submitted including representative effluent data?

_____ Yes

_____ No

If no, submit the information as applicable under **a OR b** as follows:

a. For entities discharging process wastewater attach a completed 2C form.

b. For entities discharging wastewater of domestic origin attach the results of at least one chemical analysis of the wastestream for all pollutants for which authorization to discharge is being requested and a measurement of the daily volume (gallons per day) of wastewaters being discharge.

E. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete.

This section must be signed by the same responsible person who signed the accompanying permit application or certification as per 40 CFR 122.22.

Signature _____

Date July 14, 2004

h:revised.adm
June 30, 1997

7/13/04
RLW 7/13/04

ATTACHMENT #1
TO ANTIDEGRADATION ADDENDUM
AMERICAN ENERGY CORPORATION
PERKINS RUN AIR SHAFT POND MODIFICATIONS

Introduction:

American Energy Corporation (AEC) proposes to pump water from the underground mine to Ponds 020 and 021 at their Perkins Run Air Shaft. Ponds 020 and 021 currently receive surface runoff from the air shaft facility only.

This document addresses the requirements of the Ohio Environmental Protection Agency Antidegradation Addendum, the *Preferred Design Alternative* is addressed on *Pages 1 thru 5*. The *Minimal Degradation Alternative* is addressed on *Pages 5 and 7*, and the *Non-Degradation Alternative* is addressed on *Pages 7 thru 9*.

Background:

Ponds 020 and 021 were approved by ODNR under an Incidental Boundary Revision in March, 2003. These ponds are currently covered under the General Stormwater Permit associated with Construction Activity, Facility No. 0GC00168*AG. The air shaft facility has established vegetation. All drainage from the air shaft facility flows to Ponds 020 and 021 via existing diversion ditches. Runoff from the access roadway is controlled by sumps. Runoff consists of surface drainage only. No coal is present on the air shaft site. Ponds 020 and 021 are existing, temporary structures which will be removed when the associated air shaft is no longer necessary for mine ventilation, approximately eight (8) years.

PREFERRED DESIGN ALTERNATIVE

Ponds 020 and 021 are located in Section 1, Township 6, Range 5, Wayne Township, Belmont County, Ohio. Pond 021 discharges to Pond 020, which discharges to an unnamed tributary to Piney Creek, in the Captina Creek watershed.

C.4.a. **Describe the availability, cost effectiveness and technical feasibility of connecting to existing central or regional sewage collection and treatment facilities, including long range plans for sewer service outlined in state or local water quality management planning documents and applicable facility planning documents.**

There are no central or regional sewage collection or treatment facilities in the area. Long range plans for these facilities do not exist.

C.4.b. **List and describe all government and/or privately sponsored conservation projects that exist or may have been or will be specifically targeted to improve water quality or enhance recreational opportunities on the affected water resource.**

Telephone inquiries were made in April, 2004 to the Belmont County Engineer, the Natural Resources Conservation Service District, and the County Department of Development regarding active projects planned or underway. It was determined that there were no existing projects or planned projects for the affected water resource.

C.4.c. **Provide a brief description below of all treatment/disposal alternatives evaluated for this application and their respective operational and maintenance needs.**

Preferred design alternative: Pump the water from the mine to the nearest on-site surface treatment facility where it can be tested and treated to meet requirements of the NPDES Permit before being released to the receiving stream. The procedure is more costly than the minimal degradation alternative, however, it is more reliable in terms of worker safety and mine productivity. The water will be pumped into surface ponds for treatment before being released to any surface water. The receiving ponds are both upland ponds otherwise fed by diversions from surrounding areas.

Non-degradation alternative' (s): The alternatives described would eliminate potential degradation from the immediate site; however, potential would increase, as described, in other (off-site) locations. The alternatives are: ① Pump and haul mine water by truck along public roads for a distance of approximately 55 miles to the closest approved disposal facility. Operational/ maintenance problems include cost, public road damage, and spills from haulage vehicles. ② Overland pipeline. Operational/ maintenance problems include spillage due to ruptures, stream, road, and personal property right-of-ways/crossings. ③ Allowing the water to accumulate underground. Operational/ maintenance problems include flooding of the mine and associated work stoppages. This alternative is not practicable for extended use considering the projected life of the mining operation.

Minimal degradation alternative' (s): The use of underground sumps and bulkheads would be incorporated to contain the water in the mine as it was produced. This alternative would eliminate treatment of the discharge and would minimize pumping. This alternative would be much less costly in terms of pumping and treatment than other alternatives; however, the alternative would have negative impacts on productivity, miner safety and possibly groundwater quality.

Mitigative technique/measure' (s): Both ponds will be reclaimed when bond is released by ODNR. The receiving stream will have returned to its pre-mining condition or will be in accordance with ODNR requirements.

C.4.d. **Outline of the treatment/disposal system evaluated, including the costs associated with the equipment, installation, and continued operation and maintenance.**

The water transfer system will be composed of pumps, discharge line and two temporary ponds. One pump will be kept on standby in case of need during a breakdown period of the main pump. The ponds will act as treatment facilities where the water can be collected, monitored, and treated as required to meet NPDES requirements. The cost of the pumps and piping will be approximately $10,000.00, (Ten Thousand Dollars) including a pump, a standby pump and one set of hoses. Reclamation of the site will cost approximately $50,000.00 (Fifty Thousand Dollars) based on current costs. The design flow for Pond 020 is 0.005 MGD, and for Pond 021 is 0.006 MGD (maximum design flows). Total suspended solids, iron and manganese are pollutants that may be expected in the untreated water. No chemicals are added to the water within the mine to be pumped. Quality of treated water will meet the effluent limitations as stated in the existing NPDES Permit #OIL00091; pH 6.5 to 9.0 S.U., iron 4.0 to 6.0 mg/l, manganese 2.0 to 4.0 mg/l, and T.S.S. 35 to 70. Soda Ash will be utilized for pH adjustment. The approximate cost of treatment could possibly reach $5,000.00 (Five Thousand Dollars) annually. Maintenance of the system may reach $5,000.00 (Five Thousand Dollars) annually. Settling within the ponds will not require chemical additives. Currently, this air shaft is used only for providing air into the underground mining operation.

C.4.e. Identify the substances to be discharged, including the amount of regulated pollutants to be discharged, in terms of mass and concentration.

No substances/regulated pollutants will be discharged from the treatment ponds in excess of effluent limitations. The water from the mine will be treated at the pond inlet to meet NPDES requirements before being released to the stream system.

	30 Day Average		Daily Maximum	
Parameter	Concentration (Units)	Mass * (kg/day)	Concentration (Units)	Mass * (kg/day)
Total Suspended Solids	35 mg/l	1.32	70 mg/l	2.65
Iron, Total	3.00 mg/l	0.11	6.00 mg/l	0.23
Manganese, Total	2.00 mg/l	0.08	4.00 mg/l	0.15
pH	6.50 S.U. min.		9.00 S.U. max.	
*Mass calculations completed by using concentration x 0.01 mgd flow x a conversion factor of 3.785.				

C.4.f. Describe the reliability of the treatment/disposal system, including but not limited to the possibility of recurring operation and maintenance difficulties that would lead to increased degradation.

The proposed excess water disposal system with associated environmental controls is the same or similar to those used successfully at the mine for many years, and in general, elsewhere throughout the coal industry. The site will be maintained to operate as designed. Repairs will be made as needed on a timely basis for full compliance with Federal and State laws.

C.4.g. Describe any impacts on human health and the overall quality and value of the water resource.

No adverse impacts on human health are anticipated under the Preferred Design Alternative. The water, which will be adversely affected by the mining operation, will be treated at the pond inlet to meet requirements of the Ohio Environmental Protection Agency's N.P.D.E.S. permit before being released to the receiving stream.

C.4.h. Describe and provide an estimate of the important social and economic benefits to be realized through this project. Include the number and types of jobs created and tax revenues generated.

Introduction

This question will be addressed in two parts: First, the general demand for electrical energy will be discussed and secondly, the aspects of the market which are specific to this project will be addressed. These are both areas of economic consideration which must be considered in regulation of the coal industry.

General Demand

Coal provides the most efficient and economical method of generating electrical energy and will continue to provide this service for a number of years in the future. More than half of the electrical energy consumed in the United States is generated by coal burning facilities. Over 80% of the electricity consumed in the State of Ohio is produced by coal fired power plants. (6 tons of coal is required to provide the electricity consumed by each individual annually).

Wind, solar, and hydro power generation methods are not capable of meeting the demand at this time. Nuclear energy represents too large a potential for long term environmental and safety impacts. The supply of natural gas is not sufficient nor is the distribution system adequate to meet the demands of the electrical generating industry.

The demand for electricity has increased by over 100% since 1970. Furthermore, there has been a disproportionately small increase in generating capacity during that time. Demand for electrical energy is projected to increase by another 30% to 40% between now and the year 2020. (References: State Senator Louis Blessing for the Ohio Coal Association, and Eric Burkland, President of the Ohio Manufacturers' Association)

Project Specifics

The loss to the local economy would be significant should the employment opportunity not be permitted to develop. Belmont County, Ohio, the location of this operation, is categorized as a distressed county by the Ohio Department of Development, Office of Strategic Research. This means that unemployment is 125% or greater than the most recent U.S. 5 year average unemployment rate; per capita income is at or below 80% of the U.S. per capita income; and 20% or more of the population lives below the poverty level.

The mining operation associated with the air shaft site ponds supports the direct employment of 404 people during the necessary life of the air shaft which is estimated to be 8 years. During this time, $22,595,156.00 *(Twenty-Two Million, Five Hundred Ninety-Five Thousand, One Hundred Fifty-Six Dollars)* will be paid in annual payrolls. $1,723,843.00 *(One Million, Seven Hundred Twenty-Three Thousand, Eight Hundred Forty-Three Dollars)* will be paid in annual payroll taxes. Over $6,400,000.00 *(Six Million, Four Hundred Dollars)* in other taxes will be paid annually. $66,992.00 *(Sixty-Six Thousand, Nine Hundred Ninety-Two Dollars)* in annual royalties will be paid.

In all, this mining operation contributes over $30,800,000.00 (Thirty Million, Eight Hundred Thousand Dollars) annually to the economy of this economically distressed area. This figure represents the value in current Dollars and does not account for inflation over the life of the operation.

It has been statistically proven that for every mining job created or maintained, between four and ten jobs are created or maintained in related industries or services. These related industries and services include: utility supply, transportation, material and fuel supply, and other activities which directly or indirectly support the mining operation. It may also include domestic services such as lawn and garden maintenance and day care and baby sitting services employed by the mining personnel and their families.

There are other benefits which will trickle down into the local economy. General merchants experience sales from the mine employees which they would not experience if the group were unemployed, were employed in other geographic locations, or were employed in lesser paying jobs.

C.4.i. Describe environmental benefits to be realized through this proposed project.

When the air shaft is no longer necessary for mine ventilation, it will be plugged and the entire site will be reclaimed in accordance with ODNR requirements. Following establishment of vegetative cover, Ponds 020 and 021 will be removed and their respective affected areas reclaimed per ODNR regulations. Potential end uses include farm land, pasture for livestock, or wildlife habitat. No environmental benefits will be realized through this proposal.

C.4.j. Describe and provide an estimate of the social and economic benefits that may be lost as a result of this project. Include the impacts on commercial and recreational use of the water resource.

There should be no loss of social or economic benefits from this operation. If the mine operation is not allowed to dispose of excess water in this manner, the economic benefits outlined in the previous section C.4.h. will not be maintained. The employment provided serves to improve economic conditions in the area.

The area is a rural site. It does not support any degree of tourist activity. Recreational activity includes hunting and ATV use only with the permission of the surface property owner. This activity will not be impacted in any way by the pumping of mine water to the ponds or reclamation of same.

There are no streams on site. All water that discharges as a result of the pumping operation will be treated, if necessary, to be within effluent limits established by the existing NPDES Permit.

C.4.k. Describe the environmental benefits lost as a result of this project. Include the effects on aquatic life, wildlife, threatened or endangered species.

There are no significant adverse impacts expected to water quality on or off site. The maintenance, water monitoring, treatment and reclamation proposed have been designed to mitigate or eliminate any possible adverse affects on wildlife.

There are no known threatened or endangered species in the project area.

C.4.l. Description of any construction work, fill or other structures to occur or be placed in or near a stream bed.

No construction will occur within the banks of any surface water. The surface water will receive discharge from the ponds only. This discharge will be treated at the pond inlet to meet NPDES limitations before being released.

MINIMAL DEGRADATION ALTERNATIVE

C.4.a. Describe the availability, cost effectiveness and technical feasibility of connecting to existing central or regional sewage collection and treatment facilities, including long range plans for sewer service outlined in state or local water quality management planning documents and applicable facility planning documents.

Please see response to this item on page 1 of this document.

C.4.b. List and describe all government and/or privately sponsored conservation projects that exist or may have been or will be specifically targeted to improve water quality or enhance recreational opportunities on the affected water resource.

Please see response to this item on page 1 of this document.

C.4.c. Provide a brief description below of all treatment/disposal alternatives evaluated for this application and their respective operational and maintenance needs.

Please see response to this item (minimal degradation) on page 2 of this document.

C.4.d. Outline of the treatment/disposal system evaluated, including the costs associated with the equipment, installation, and continued operation and maintenance.

The water transfer system will consist of installing sumps and bulkheads in the underground workings to contain the water. The installations would be made away from the working face so that interference with mining operations would be minimized; however failure of a bulkhead could jeopardize the safety of workmen or interfere with the mining operation. Due to unknowns such as where water will be encountered, the quantity of water that will require storage underground, and maintenance needs, cost is very difficult to estimate.

C.4.e. Identify the substances to be discharged, including the amount of regulated pollutants to be discharged, in terms of mass and concentration.

Please see response to this item on page 2 of this document.

C.4.f. Describe the reliability of the treatment/disposal system, including but not limited to the possibility of recurring operation and maintenance difficulties that would lead to increased degradation.

Please see response to item C.4.c. (Minimal Degradation Alternative) on page 2 of this document.

C.4.g. Describe any impacts on human health and the overall quality and value of the water resource.

Please see response to item C.4.c. (Minimal Degradation Alternative) on page 2 of this document.

C.4.h. Describe and provide an estimate of the important social and economic benefits to be realized through this project. Include the number and types of jobs created and tax revenues generated.

Please see response to this item on pages 3 and 4 of this document.

C.4.i. Describe environmental benefits to be realized through this proposed project.

Please see response to this item on page 4 of this document.

C.4.j. Describe and provide an estimate of the social and economic benefits that may be lost as a result of this project. Include the impacts on commercial and recreational use of the water resource.

Please see response to this item on page 4 of this document.

C.4.k. Describe the environmental benefits lost as a result of this project. Include the effects on aquatic life, wildlife, threatened or endangered species.

Please see response to this item on page 5 of this document. There are no known threatened or endangered species in the project area.

C.4.l. Description of any construction work, fill or other structures to occur or be placed in or near a stream bed.

There is no fill, or structures within a streambed on this site. Pond 020 is no closer than 80 feet from the stream bank, and Pond 021 is over 100 feet from the stream.

NON-DEGRADATION ALTERNATIVE

C.4.a. Describe the availability, cost effectiveness and technical feasibility of connecting to existing central or regional sewage collection and treatment facilities, including long range plans for sewer service outlined in state or local water quality management planning documents and applicable facility planning documents.

Please see response to this item on page 1 of this document.

C.4.b. List and describe all government and/or privately sponsored conservation projects that exist or may have been or will be specifically targeted to improve water quality or enhance recreational opportunities on the affected water resource.

Please see response to this item on page 2 of this document. (Non-Degradation Alternative).

C.4.c. Provide a brief description below of all treatment/disposal alternatives evaluated for this application and their respective operational and maintenance needs.

Please see response to this item on page 2 of this document. (Non-Degradation Alternative).

C.4.d. Outline of the treatment/disposal system evaluated, including the costs associated with the equipment, installation, and continued operation and maintenance.

None of these three alternatives are practical from a cost, permitting, political/public relations, or operational standpoint. Please see response to this item on page 2 of this document (Non-Degradation Alternative).

C.4.e. Identify the substances to be discharged, including the amount of regulated pollutants to be discharged, in terms of mass and concentration.

Under the non-degradation alternative, no substances will be purposely discharged.

C.4.f. Describe the reliability of the treatment/disposal system, including but not limited to the possibility of recurring operation and maintenance difficulties that would lead to increased degradation.

No on-site discharge is proposed under this alternative. For reliability, see response to item C.4.c. on Page 2.

C.4.g. Describe any impacts on human health and the overall quality and value of the water resource.

The potential for impacts to human health and the overall quality of the water resource would be much greater under the non-degradation alternatives than under either the preferred or minimal alternatives. There could be no protection provided for surface waters. Soil liners, diversion ditches, treatment ponds, hay bales, silt fences and temporary sumps are proposed in the two previous alternatives. These features cannot be provided to protect all potential contamination sites in an overland operation which is not confined to permitted areas.

C.4.h. Describe and provide an estimate of the important social and economic benefits to be realized through this project. Include the number and types of jobs created and tax revenues generated.

The condition of the local economy and the economic benefits of this mining operation were discussed in earlier alternatives. In this situation, the non-degradation alternatives may actually shorten the life of the mine.

C.4.i. Describe environmental benefits to be realized through this proposed project.

If any of the non-degradation disposal plans are undertaken, there would be no direct change in the existing environmental conditions. Ponds on the site could not be utilized for treatment or discharge of mine water; however, the potential for unintentional (accidental), untreatable discharges would be much higher.

C.4.j. Describe and provide an estimate of the social and economic benefits that may be lost as a result of this project. Include the impacts on commercial and recreational use of the water resource.

It is impossible to estimate the social and economic losses as a result of public and political relations concerning difficulties related to rights of way and rights of entry required for crossing public and private lands and roads with trucks or a pipeline, as well as negotiating the agreements necessary to use another disposal facility. There is no commercial or recreational use of water resources involved.

C.4.k. Describe the environmental benefits lost as a result of this project. Include the effects on aquatic life, wildlife, threatened or endangered species.

There could be unintentional, unforeseen impacts as previously described in the item C.4.c. response on page 2. If spillage from trucks or pipeline leakage occurred, the threat to aquatic life and wildlife could be far reaching, as well as difficult to detect or correct.

C.4.l. Description of any construction work, fill or other structures to occur or be placed in or near a stream bed.

Under the non-degradation alternative, no construction work, fill or other structures would be placed in or near a stream bed.

Mitigative Technique/Measure'(s):

No mitigation is planned. Waters being discharged will be treated to meet requirements of the NPDES permit prior to being released to receiving waters.

9-88

OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION

ATTACHMENT 20
(SEDIMENTATION POND/IMPOUNDMENT DATA SHEET)

Applicant's Name AMERICAN ENERGY CORPORATION Pond # 020

Type of impoundment EXCAVATED Permanent _____ Temporary X

1. POND DRAINAGE AREA DATA:

a) Drainage area 10.7 acres
b) Disturbed area 10.7 acres
c) Ave. land slope 25 %
d) Hydrologic soil group C
e) Hydraulic length 1000 ft.
f) Cover/condition of the undisturbed area N/A

2. DESIGN STORM CRITERIA:

a) Method:

1) Design method (s) including computer programs: SEDCAD 4.0
2) SCS curve number 87

b) Rainfall Amount/Peak Flow

		Rainfall, in.	Peak flow, cfs.
1)	10 year, 24 hour =	3.7	9.3
2)	25 year, 24 hour =	4.2	11.2
3)	50 year, 6 hour = (if permanent)		
4)	100 year, 6 hour = (if 20/20 size)		

3. POND SIZE: N/A EXCAVATED POND

a) Dimensions:
1) Dam height _____ ft.
2) Dam width _____ ft. (MIN)
3) Dam length _____ ft.
4) Dam downstream slope _____ % (MAX)
5) Dam upstream slope _____ % (MAX)
6) Core length _____ ft. _____ ft. _____ ft

b) Sediment storage volume 0.6 ac.-ft. is provided below the 1072.2 foot elevation.

c) Stage/Area Data:

		Elevation ft.	Surface Area ac.	Volume ac.-ft.
1)	Bottom of pond	1068	0.053	0.00
2)	Streambed at upstream toe:			
3)	Principal spillway crest:			
4)	Emergency spillway crest:	1072.2	0.23	0.6
5)	Top of embankment:	1074	0.3	1.1

POND # 020

4. PRINCIPAL SPILLWAY: N/A EXCAVATED POND

a) Pipe length _____ ft.
b) Pipe diameter _____ in.
c) Pipe slope _____ %
d) Riser diameter _____ in.
e) Riser height _____ ft.
f) Type of pipe _____
g) Number of anti-seep collars _____; spacing along pipe _____
h) Does the design include a trash rack? _____ Yes, _____ No.
i) Does the design include an anti-vortex device? _____ Yes, _____ No.

5. EMERGENCY SPILLWAY/EXIT CHANNEL:

a) Base width 15 ft.
b) Design flow depth 0.2 ft. Depth in level section 0.5 ft.
c) Exit slope 33 %
d) Exit velocity 4.5 fps
e) Channel lining ROCK RIPRAP
f) Side slopes 2:1
g) Freeboard 1.2 ft.
h) Entrance slope 50 %
i) Length of level section 20 ft.

6. The minimum static factor of safety for this impoundment is 1.5

7. Provide as an addendum to this attachment a detailed plan view or 2 cross sections of the impoundment.

8. COMMENTS
THIS IS THE SECOND POND IN A SIERIES OF TWO. POND 021 WILL TREAT 0.5 ACRE-FEET, POND 020 WILL TREAT 0.6 ACRE FEET.

9. Is this an MSHA structure? _____ Yes, X No. If "yes," provide the MSHA ID. Number if one has been assigned _____.

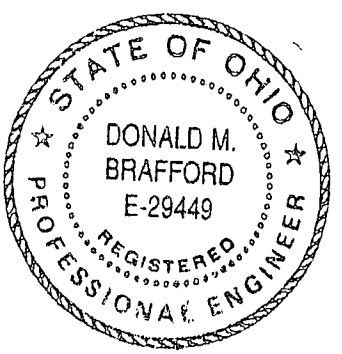
10. If this is to be retained as a permanent impoundment, submit an addendum to this attachment demonstrating compliance with rule 1501:13-9-04(H) (2) of the Administrative Code.

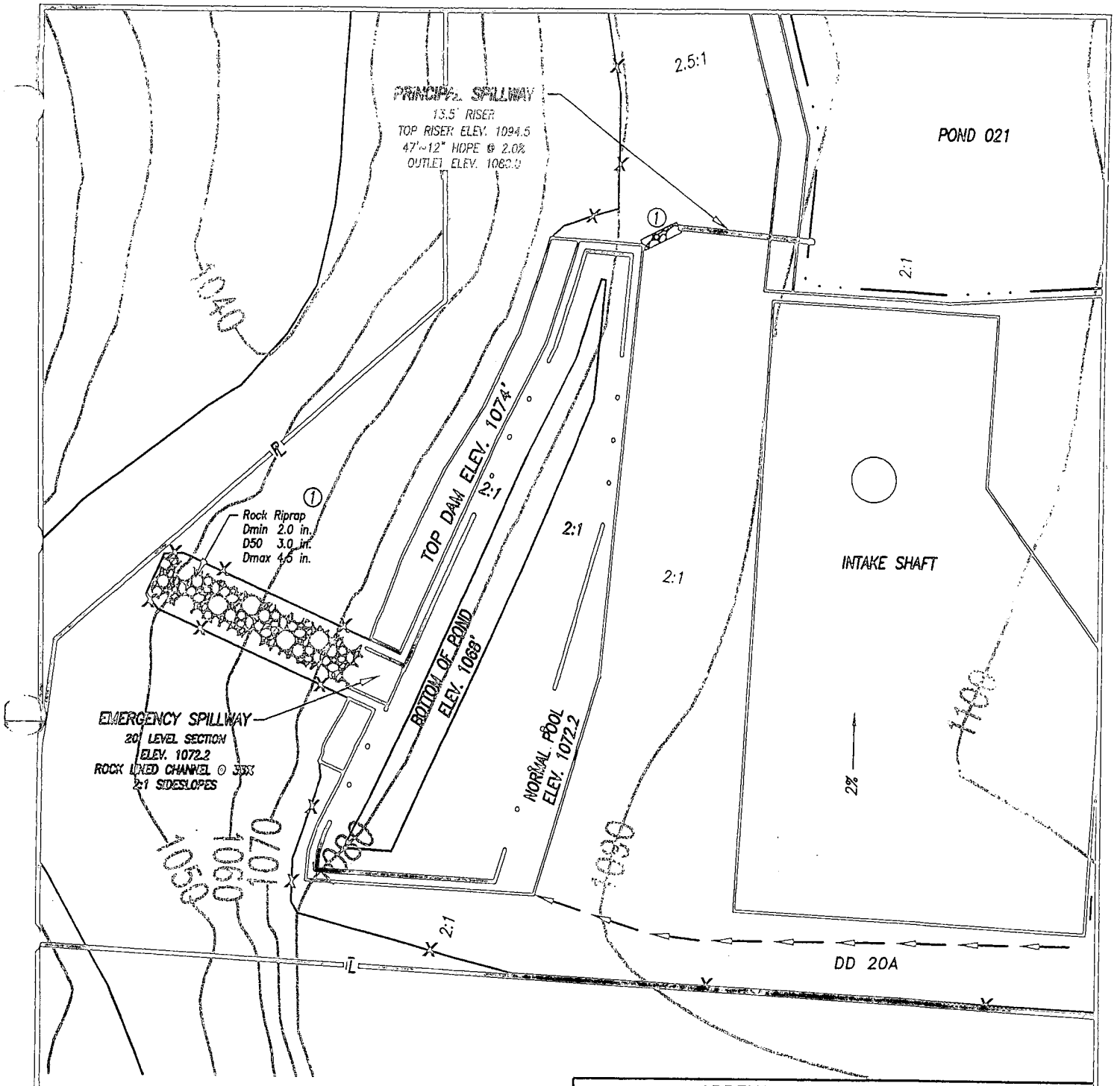
11. I hereby certify that this impoundment is designed to comply with the applicable requirements of rule 1501:13-9-04 of the Administrative Code using current, prudent engineering practices.

Donald M Brafford
Signature

1-9-03
Date

P.E. SEAL





3-7-03
① Revised per ODNR by JCC

STATE OF OHIO
DONALD M. BRAFFORD
E-49449
REGISTERED
PROFESSIONAL ENGINEER

ADDENDUM TO ATTACHMENT 20

EXCAVATED POND 020

Applicant: AMERICAN ENERGY CORPORATION		
Permit Number: D-0425		
Township: WAYNE		County: BELMONT
Page: 1 of 1		Scale: 1"=50'
Date:01/08/03	Date Revised: 1/28/03	Comm #02001-S

Jack A. HAMILTON & Associates, Inc.
342 High St., Box 471
Flushing, Ohio 43977
Ph: (740) 968-4947
Fax: (740) 968-4225
e-mail: hamilton@1st.net
www.hamiltonandassoc.com

02001-S AEC Century Shaft\POND020.dwg

OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION

ATTACHMENT 20
(SEDIMENTATION POND/IMPOUNDMENT DATA SHEET)

Applicant's Name AMERICAN ENERGY CORPORATION Pond # 021

Type of impoundment EMBANKMENT Permanent _____ Temporary X

1. POND DRAINAGE AREA DATA:

a) Drainage area 6.3 acres
b) Disturbed area 6.3 acres
c) Ave. land slope 25 %
d) Hydrologic soil group C
e) Hydraulic length 900 ft.
f) Cover/condition of the undisturbed area N/A

2. DESIGN STORM CRITERIA:

a) Method:

1) Design method (s) including computer programs: SEDCAD 4.0
2) SCS curve number 87

b) Rainfall Amount/Peak Flow

	Rainfall, in.	Peak flow, cfs.
1) 10 year, 24 hour =	3.7	10.5
2) 25 year, 24 hour =	4.2	12.4
3) 50 year, 6 hour = (if permanent)		
4) 100 year, 6 hour = (if 20/20 size)		

3. POND SIZE: N/A EXCAVATED POND

a) Dimensions:

1) Dam height 16 ft.
2) Dam width 10 ft. (MIN)
3) Dam length 605 ft.
4) Dam downstream slope 40 % (MAX)
5) Dam upstream slope 40 % (MAX)
6) Core length 605 ft. 10 ft. 5 ft.

b) Sediment storage volume 0.5 ac.-ft. is provided below the 1094.5 foot elevation.

c) Stage/Area Data:

	Elevation ft.	Surface Area ac.	Volume ac.-ft.
1) Bottom of pond	1094.1	1.23	0.0
2) Streambed at upstream toe:			
3) Principal spillway crest:	1094.5	1.27	0.5
4) Emergency spillway crest:	1094.9	1.31	1.0
5) Top of embankment:	1096	1.43	2.5

POND # 021

4. PRINCIPAL SPILLWAY: N/A EXCAVATED POND

a) Pipe length 47 ft.
b) Pipe diameter 12 in.
c) Pipe slope 2.0 %
d) Riser diameter 18 in.
e) Riser height 13.5 ft.
f) Type of pipe Corrugated HDPE
g) Number of anti-seep collars 2 ; spacing along pipe 15
h) Does the design include a trash rack? _____ Yes, X No.
i) Does the design include an anti-vortex device? _____ Yes, X No.

5. EMERGENCY SPILLWAY/EXIT CHANNEL:

a) Base width 15 ft.
b) Design flow depth * ft. Depth in level section * ft.
c) Exit slope * %
d) Exit velocity * fps
e) Channel lining Vegetative
f) Side slopes 2:1
g) Freeboard 1.1 ft.
h) Entrance slope 40 %
i) Length of level section 20 ft.

6. The minimum static factor of safety for this impoundment is 1.5

7. Provide as an addendum to this attachment a detailed plan view or 2 cross sections of the impoundment.

8. COMMENTS

THIS IS THE FIRST POND IN A SIERIES OF TWO. POND 021 WILL TREAT 0.5 ACRE-FEET, POND 020 WILL TREAT 0.6 ACRE FEET.

THIS POND IS TO BE OVER EXCAVATED TO AN ELEVATION OF 1080. THE POND WILL THEN BE FILLED WITH WASTE TAILINGS FROM DRILLING UP TO ELEVATION 1094.1.

* THIS POND DOES NOT HAVE ENOUGH RUNOFF TO OVERFLOW INTO THE EMERGENCY SPILLWAY.

9. Is this an MSHA structure? _____ Yes, X No. If "yes," provide the MSHA ID. Number if one has been assigned _____.

10. If this is to be retained as a permanent impoundment, submit an addendum to this attachment demonstrating compliance with rule 1501:13-9-04(H) (2) of the Administrative Code.

11. I hereby certify that this impoundment is designed to comply with the applicable requirements of rule 1501:13-9-04 of the Administrative Code using current, prudent engineering practices.

Signature

3-7-05
Date

STATE OF OHIO
DONALD M. BRAFFORD
E-29449
REGISTERED PROFESSIONAL ENGINEER

Revised 1/28/03

Summary of 11/10/09 Meeting Regarding Outstanding Permit Actions at Ohio Valley Coal Co. and American Energy Century Mine

B. AEC

1. PTI application 06-7633 for the pipeline from AEC to OVC was submitted 4/8/04.

For the pipeline PTI to move forward the antidegradation social economic justification must be updated and include the AEC filter press failure report to show that just fixing the original process was not a reasonable option.

We cannot issue this PTI until the NPDES permit modification at OVCC to accept the flow from AEC is approved.

2. AEC NPDES permit renewal submitted 7/9/07:

a. Update the list of outfalls (ponds). Make sure there is a 2C for each.

b. Pond effluent data needs to be updated to include TDS and low level mercury.

C. OVC

1. NPDES permit modification for Williams Creek bore hole submitted 8/14/00 – will be dropped.

2. NPDES permit modification to add the Anderson Run bath house - We will roll this into the renewal - submit a 2C form for this outfall.

3. PTI application 06-6409 pumping from dam #2 to fresh water pond can be processed if we drop the sed pond (pond #15) for Casey Run from the package (see below). Submit a letter withdrawing the pond #15 PTI.

4. NPDES permit renewal submitted 6/22/2005

   a. Needs to be updated with TDS and low level mercury data.

   b. Needs a complete form 2C listing all of the outfalls and their data

5. PTI for sediment pond for slurry impoundment construction in Casey Run - Company will submit letter withdrawing this PTI.

6. NPDES permit modification submitted 6/4/2004 for new discharge from new slurry impoundment in Casey Run. Company will submit a letter withdrawing this permit.

Abbot Stevenson - Meeting re: AEC

From: "Wood, Farley" <fwood@coalsource.com>
To: "Abbot Stevenson" <abbot.stevenson@epa.state.oh.us>
Date: Sat, Oct 24, 2009 10:30 AM
Subject: Meeting re: AEC
CC: "Blumling, Fred" <fblumling@coalsource.com>

Abbot,

I would like to sit down with you and brainstorm regarding AEC's NPDES renewal. My schedule is open, (at least at the moment):

- Wed or Friday of next week (Oct 28 and 30)
- Thursday of the following week (Nov 5th)
- Tuesday thru Friday of the next week (Nov 10-13)

Let me know what dates would work for you. It will probably be Fred and I.

incerely,
Farley R. Wood, P.E.
Director of Environmental Compliance
Murray Energy Corp.
56854 Pleasant Ridge Road
Alledonia, OH 43902
(740) 926-1351 Office
(740) 926-9112 Fax
(740) 310-0308 Cell

Loose

Loose

342 High St., Box 471
Flushing, OH 43977
Ph: (740) 968-4947
Fax: (740) 968-4225
e-mail: hamilton@1st.net
www.hamiltonandassoc.com

Jack A. HAMILTON & Associates, Inc.

Civil Engineering
Land Surveying
Mine Permitting
GIS Data Services
Land Development
Global Positioning Systems

June 25, 2007

RE: NPDES PERMIT NO. OIL00091*GD
E.P.A. I.D. NO. OH0059552

American Energy Corporation
43521 Mayhugh Hill Rd., Twp. Hwy. 88
Beallsville, OH 43759

Ms. Abbot Stevenson
Division of Surface Water
Ohio Environmental Protection Agency
2195 Front Street
Logan, OH 43138-9031

Dear Ms. Stevenson,

We are applying for renewal of the above referenced NPDES permit. Under U.S. E.P.A. Rule 40CFR 122.21 (g)(7)(I)(B), we understand that State water quality agencies can waive some wastewater analyses required by the permit application form where the character of the discharge makes such waiver appropriate.

For the outfalls shown on the attachment, we request a waiver of the analyses shown due to the character of the wastewater being discharged, as specified on the attachment.

Sincerely,

Jack A. Hamilton & Associates, Inc.
Consultants for American Energy Corporation

Ellen M. Greer

Ellen M. Greer, Permitting

RECEIVED

JUL 09 2007

AEC 02630

342 High St., Box 471
Flushing, OH 43977
Ph: (740) 968-4947
Fax: (740) 968-4225
e-mail: hamilton@1st.net
www.hamiltonandassoc.com

Jack A. HAMILTON & Associates, Inc.

Civil Engineering
Land Surveying
Mine Permitting
GIS Data Services
Land Development
Global Positioning Systems

June 25,2007

RE: NPDES PERMIT NO. OIL00091*GD
E.P.A. I.D. NO. OH0059552

American Energy Corporation
43521 Mayhugh Hill Rd., Twp. Hwy. 88
Beallsville, OH 43759

Abbot Stevenson
Ohio Environmental Protection Agency
2195 Front Street
Logan, OH 43138-9031

Dear Abbot,

Attached is the renewal application for the above referenced NPDES permit.

Please note that Outfalls: 012, 013, 014, 018A, 019, 020, 023, 024, 025, EBS-3 & 1-S have never discharged, therefore there are no water analyses for these ponds. Additionally, Pond 016 has been eliminated by the Phase 1 & 2 coarse coal refuse disposal, and runoff is now directed to ponds 012, 013, & 014.

Should you have any questions, please feel free to call.

Sincerely,

Jack A. Hamilton & Associates
Consultants for American Energy Corporation, Inc.

Ellen M. Greer

Ellen M. Greer, Permitting

Application Processing Personnel: JUL 05 2007

Please note that no application fee check is attached to this submittal. American Energy Corporation submitted an NPDES Modification in September, 2004 that was never processed by the agency.

I was instructed by Abbot Stevenson to apply the fee associated with the previously submitted modification to the enclosed NPDES Renewal Application.

If you have questions concerning the fee for the enclosed NPDES Renewal Application, by her direction, please contact Abbot Stevenson for clarification.

342 High St., Box 471
Flushing, OH 43977
Ph: (740) 968-4947
Fax: (740) 968-4225
e-mail: hamilton@1st.net
www.hamiltonandassoc.com

Jack A. HAMILTON & Associates, Inc.

Civil Engineering
Land Surveying
Mine Permitting
GIS Data Services
Land Development
Global Positioning Systems

LETTER OF TRANSMITTAL

TO: Abbot Stevenson
O.E.P.A. Southeast District Office
2195 Front Street
Logan, Ohio 43138-9031

DATE: 07-05-07 COMM. 02001
RE: American Energy Corp.
Century Mine
NPDES Renewal Application

WE ARE SENDING: ☒ Attached ☐ Under Separate Cover BY THE FOLLOWING METHOD: US Mail

DATE	NO.	DESCRIPTION
	1	Cover Letter
	1	Waiver Request letter and addendum
	1	Antidegradation Addendum
	1	General Form 1 with Location Map
	1	NPDES Form 2C, Line Drawing and Addendum
	1	Form 2C pages V-1 thru V-9 for Ponds 002, 008C, 011, 012, 013, 014, 015,
		017, 018A, 019, 020, 023, 024, 025, EBS-3, and 1-S

RECEIVED
JUL 09 2007
Division of Mineral Resources Management
Southeast District

THESE ARE TRANSMITTED: ☐ For Your Use ☐ As Requested ☒ For Review/Comment ☒ For Approval ☐ Returned

REMARKS: Dear Abbot, Thank you for your patience in this matter. Please do not hesitate to contact me for any additional information, if necessary.

COPY TO File, American Energy Corp.

SIGNED Ellen M. Greer

Check ID#: [illegible]
Document#: [illegible]
Org/Place/Person: [illegible]
Revenue ID#: [illegible]

Please t... FORM 1 GENER... | ...ECTION AGENCY ...ORMATION ...its Program ...ons" before starting)

I. EPA I.D. NUMBER [illegible]

LABEL ITEMS	
I. EPA I.D. NUMBER	
III. FACILITY NAME	
V. FACILITY MAILING ADDRESS	
VI. FACILITY LOCATION	

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through G to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms.**

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.?** (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.?** (FORM 2B)		X	
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	X		X	D. Is this a proposed facility (*other than those described in A or B above*) which will result in a **discharge** to **waters of the U.S.?** (FORM 2D)		X	
E. Is this a facility which does not discharge process **wastewater?** (FORM 2E)		X		F. Is this a facility which discharges stormwater associated with industrial activity? (FORM 2F)		X	
G. Do you generate **sewage sludge** that is ultimately regulated by Part 503? Do you generate **sewage sludge** that is sent to another **facility** for treatment or blending? Do you process or derive material from **sewage sludge** that is disposed in a manner subject to Part 503? (FORM 2S)		X					

III. NAME OF FACILITY

AMERICAN ENERGY CORPORATION

IV. FACILITY CONTACT

A. NAME & TTILE *(last, first, title)*	B. PHONE *(area code & no.)*
BLUMLING, FRED, ENVIRONEMENTAL ENGINEER	(740) 926 - 9152

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

43521 MAYHUGH HILL RD., TWP HWY. 88

B. CITY OR TOWN	C. STATE	D. ZIP CODE
BEALLSVILLE	OH	43716

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

43521 MAYHUGH HILL RD., TWP HWY. 88

B. COUNTY NAME

BELMONT

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE *(if known)*
BEALLSVILLE	OH	43716	

RECEIVED JUL 09 2007 Ohio Environmental Protection Agency Southeast District

PAID Amount [illegible] Date [illegible] Ck. [illegible] 14871 Date [illegible]

EPA Form 3510-1 (Rev. for Ohio EPA use 2/06)

CONTINUE ON REVERSE

Click to clear all entered information (on both pages of this form) CLEAR

AEC 02634

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
(specify) 1222	(specify)
C. THIRD	**D. FOURTH**
(specify)	(specify)

VIII. OPERATOR INFORMATION

A. NAME	B. Is the name listed in Item VIII-A also the owner?
American Energy Corporation	☒ Yes ☐ No

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)			D. PHONE (area code & no.)
F = FEDERAL S = STATE P = PRIVATE	M = PUBLIC (other than federal or state) O = OTHER (specify)	P	(740) 926 - 9152

E. STREET OR P.O. BOX

43521 Mayhugh Hill Road, Twp. Rd. 88

F. CITY OR TOWN	G. STATE	H. ZIP CODE	IX. INDIAN LAND
Beallsville	OH	43716	Is this facility located on Indian lands? ☐ Yes ☒ No

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to surface water)	D. PSD (Air emissions from proposed sources)	
OIL00091*GD		
B. UIC (Underground injection of fluids)	E. OTHER (specify)	
	0GR00014	(specify) Industrial General Stormwater
C. RCRA (Hazardous waste)	F. OTHER (specify)	
		(specify)

XI. MAP

Attach to this application a topographical map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS ***(provide a brief description)***

Active underground coal mining surface facilities

XIII. CERTIFICATION *(see instructions)*

I certify under penatly of law that I have personally examined and am famimliar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I belive that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
James R. Turner, Treasurer		7/3/07

COMMENTS FOR OFFICIAL USE ONLY

EPA Form 3510-1 (Rev. for Ohio EPA use 2/06)

Please type or print in the unshaded areas only.

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*
OIL0091*GD

Form Approved
OMB No. 2040-0086
Approval expires 5-31-92

FORM
2C
NPDES

U.S. ENVIRONMENTAL PROTECTION AGENCY

APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER

EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS

Consolidated Permits Program

OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the newest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER *(list)*	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
002	39	53	35	81	01	22	Unnamed Tributary to Piney Creek
008C	39	53	48	81	01	12	Piney Creek
011	39	53	47	81	01	18	Piney Creek
012	39	53	50	81	01	19	Unnamed Tributary to Piney Creek
013	39	53	51	81	01	27	Unnamed Tributary to Piney Creek
014	39	53	56	81	01	46	Unnamed Tributary to Piney Creek
015	39	54	11	81	01	54	Unnamed Tributary to Piney Creek
017	39	53	45	81	01	21	Piney Creek
018A	39	54	08	81	01	17	Unnamed Tributary to Piney Creek
019	39	54	27	81	01	28	Captina Creek
020	39	51	59	81	02	05	Piney Creek
023	39	50	38	81	01	23	Unnamed Tributary to East Fork
024	39	50	46	81	01	04	Unnamed Tributary to East Fork
025	39	50	41	81	01	20	Unnamed Tributary to East Fork
EBS-3	39	52	30	81	00	10	Unnamed Tributary to Crabapple Creek
1-S	39	54	29	81	01	32	Captina Creek

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a Pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater Cooling water, and storm water; (2) the average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO *(list)*	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION *(list)*	b. AVERAGE FLOW *(include units)*	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
002	Storm Water Runoff	< 1 gpd	Sedimentation	1-U
			Discharge to Surface Water	4-A
			Reuse/Recycle of Treated Effluent	4-C
008C	Storm Water Runoff	151,703 gpd	Sedimentation	1-U
			Discharge to Surface Water	4-A
011	Storm Water Runoff	107,708 gpd	Sedimentation	1-U
			Discharge to Surface Water	4-A
			Reuse/Recycle of Treated Effluent	4-C

012	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
013	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
014	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
015	Storm Water Runoff	12,542 gpd	Sedimentation	1-U
			Discharge to Surface Water	4-A
017	Sanitary	6,618 gpd	Dechlorination, Disinfection,	2-E, 2-F
			Discharge to Surface Water	4-A
			Aerobic Digestion	5-A
018A	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
019	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
020	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
023	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
024	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
025	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
EBS-3	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
1-S	Storm Water Runoff	0	Sedimentation	1-U
			Discharge to Surface Water	4-A
			Reuse/Recycle of Treated Effluent	4-C

OFFICIAL USE ONLY *(effluent guidelines sub-categories)*

C. Except for storm water runoff, leaks, or spills, are nay of the discharges described in Items II-A or B intermittent or seasonal?
☐ YES *(Complete the following table)* ☒ NO *(go to Section III)*

1. OUTFALL NUMBER *(list)*	2. OPERATION(S) CONTRIBUTING FLOW *(list)*	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK *(specify average)*	b. MONTHS PER YEAR *(specify average)*	a. FLOW RATE *(in mgd)*		b. TOTAL VOLUME *(specify with units)*		c. DURATION *(in days)*
				1. LONG TERM AVG.	2. MAX. DAILY	1. LONG TERM AVG.	2. MAX DAILY	

III. PRODUCTION

A. Does an effluent quideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
☐ YES *(Complete Item III-B)* ☒ NO *(go to Section IV)*

B. Are the limitations in the applicable effluent quideline expressed in terms of production *(or other measure of operation)*?
☐ YES *(Complete Item III-C)* ☒ NO *(go to Section IV)*

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent quideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS *(list outfall numbers)*
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. *(specify)*	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.
☐ YES *(Complete the following table)* ☒ NO *(go to Item IV-B)*

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs *(or other environmental projects which may affect your discharges)* you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.
☐ MARK "X" IS DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C : See instructions before proceeding- Complete one set for each outfall- Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which yiou know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe th ereasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
NONE			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ **YES***(list all such pollutants below)* ☒ **NO** *(go to ItemVI-B)*

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ **YES** *(identify the test(s) and describe their purposes below)* ☒ **NO** *(go to Section VIII)*

VIII. CONTRACT ANALYSIS INFORMATION

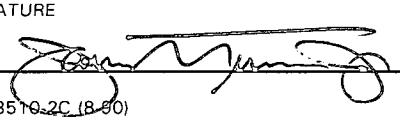
Were any of the analysis reported in Item V performed by a contract laboratory or consulting firm?

☒ **YES** *(list the name, address, and telephone number of,* and pollutants *analyzed* by each such laboratory or firm (below) ☐ **NO** *(go to Section IX)*

A. NAME	B. ADDRESS	C. TELEPHONE *(area code & no.)*	D. POLLUTANTS ANALYZED *(list)*
Industrial Lab Analysis, Inc.	2240 Williamsburg Drive Glen Dale, WV 26038	304-233-5595	T.S.S., pH, Sulfate, Aluminum, Iron, Manganese, Antimony, Arsenic, Beryllium, Cadmium, Lead, Mercury, Nickel, Selenium, Silver, Zinc, BOD, Ammonia, Chlorine, Fecal Coliform, Magnesium

IX. CERTIFICATION

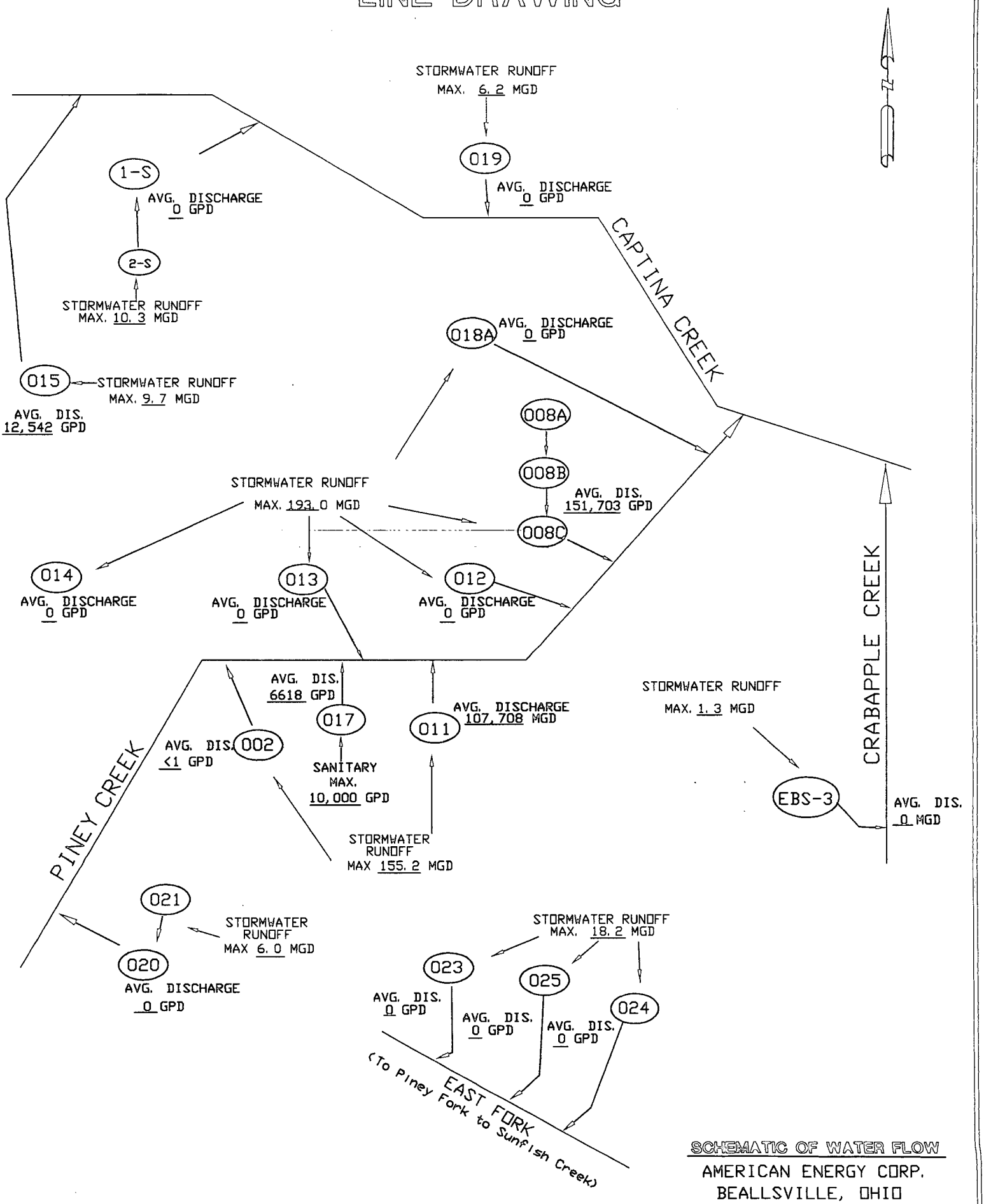
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who mange the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE *(type or print)*	B. PHONE NO. *Area code & no.)*
James R. Turner, Treasurer	740-926-9152
C. SIGNATURE	D. DATE SIGNED
	7/23/07

EPA form 3510-2C (8-90)

AEC 02640

LINE DRAWING



SCHEMATIC OF WATER FLOW

AMERICAN ENERGY CORP.
BEALLSVILLE, OHIO
BELMONT & MONROE COUNTIES

NOTE: Maximum Stormwater Runoff values based on 10yr/24 hr. design storm event.

ADDENDUM TO SCHEMATIC OF WATER FLOW

American Energy Corporation
NPDES Permit OIL00091*GD

Outfall	Description		Actual Average Flow/gpd	Design Storm Event Control Capacity/mgd
019	Sed. pond-train loadout, emergency slurry containment		0	6.2
1-S	Mine make-up water pond, 2-S discharges to 1-S		0	10.3
2-S	Sed. pond- flows to 1-S		0	
015	Sed. pond-coarse refuse disposal area		12,542	9.7
		Totals	12,542 gpd	26.2 mgd
018A	Sed. pond-prep plant area runoff		0	33.0
008C	Sed. pond-coarse refuse disposal area runoff		151,703	32.3
012	Sed. pond-coarse refuse disposal area runoff		0	10.2
013	Sed. pond-coarse refuse disposal area runoff		0	51.6
014	Sed. pond-coarse refuse disposal area runoff		0	65.9
		Totals	151,703 gpd	193.0 mgd
002	Mine make-up water pond		<1	6.5
017	Sanitary plant discharge		6,618	0.01
011	Mine make-up water pond		107,708	148.7
		Totals	114,327 gpd	155.2 mgd
020	Air shaft disturbed surface area sed. pond		0	6.0
021	Air shaft tailings storage pond, discharges to 020		0	6.8
		Totals	0	12.8 mgd
EBS-3	Air shaft disturbed surface area sed. pond		0	1.3
		Totals	0	1.3 mgd
023	Air shaft disturbed surface area sed. pond		0	5.8
024	Air shaft tailings storage pond		0	8.9
025	Air shaft disturbed surface area sed. pond (not yet constructed)		0	3.5
		Totals	0	18.2 mgd
		Grand Totals	278,572 gpd (0.28 mgd)	406.7 mgd